

**ARIZONA GAME AND FISH DEPARTMENT  
HABITAT PARTNERSHIP COMMITTEE  
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number: 12-407

**PROJECT INFORMATION**

**Project Title:** Units 20C, 42, 44A, 44B Adaptive Lion Management Project

**Region and Game Management Unit:** Region IV / GMUs 20C, 42, 44A, 44B

**Local Habitat Partnership Committee (LHPC):**  
• Southwest

**Was the project presented to the LHPC?**  
YES[x] NO[]

**Has this project been submitted in previous years?** YES[x] NO[]

**If Yes, was it funded?** YES[x] NO[] → **Funded HPC Project #(s):** 09-405

**Project Type:** Adaptive Lion Management Project

**Brief Project Summary:**

Region 4, North Sector has begun implementing the approved 20C, 42,44A, 44B Adaptive Lion Management Plan which provides for collaring lions with GPS/satellite collars and collecting natural history data such as demographics, home range size, movement corridors, DNA based regional relatedness of individuals and most importantly prey species selection and frequency. In addition, the plan allows for the integrated management of both bighorn sheep populations and the mountain lion population within the project area. As an adaptive management plan we continually evaluate information and results to formulate modifications and changes in strategy to both meet objectives and test assumptions.

**Big Game Wildlife Species to Benefit:** Bighorn Sheep and Mountain Lions

**Implementation Schedule (Month/Day/Year):**

Project Start Date: 2-11-12

Project End Date: 12-31-13

**Environmental Compliance:**

NEPA Completed: Yes[] No[] N/A[x]

Projected Completion Date: \_\_\_\_\_

State Historic Preservation Office - Archaeological Clearance:

Yes[] No[] N/A[x]

Projected Completion Date: \_\_\_\_\_

Arizona Game and Fish Department

EA Checklist: Completed on 5-19-12

**PROJECT FUNDING**

**Special Big Game License Tag Funds Requested:** \$ 7,000

**Cost Share or Matching Funds:** \$ 3,718

**Total Project Costs:** \$ 10,718

**PARTICIPANT INFORMATION**

**Applicant** (please print):  
Dave Conrad

**Address:**

**E-mail:**  
dconrad@azgfd.gov

**Telephone:** 623-910-7872

**Date:** 8-28-12

**AGFD Contact and Phone No.** (If applicant is not AGFD personnel):

**Project has been coordinated with:**  
Game Branch, Habitat Branch, ADBSS

**NEED STATEMENT – PROBLEM ANALYSIS:**

Since initial implementation of the project in June of 2010 and the beginning of field work in February of 2012 the following is an itemized accounting of expenditures from the tag fund monies;

<u>INITIAL TAG FUND</u> .....	\$27,800
NORTHSTAR (gps collars, trap alarms, collar and trap alarm repair and programming, data transmission airtime, battery replacement).....	\$19,800
SIRTRACK (website and data charges).....	\$2,695
VETERINARY (capture drugs, medical supplies).....	\$549
MISC. EQUIPMENT (electronic calls, ear tags and pliers, snare hardware etc.).....	\$562
LOWES (50% cost share with KOFA project on chest freezer).....	\$413
TAX.....	\$1,148
<u>REMAINING FUNDS</u> .....	\$2,633

Additional funds are required to cover ongoing expenses for airtime/data transmission coverage, equipment repair and misc. equipment/hardware purchases. This funding request covers the period through 12-31-13.

**PROJECT OBJECTIVES:**

Region 4, North Sector has begun implementing the approved 20C, 42,44A, 44B Adaptive Lion Management Plan which provides for collaring lions with GPS/satellite collars and collecting natural history data such as demographics, home range size, movement corridors, DNA based regional relatedness of individuals and most importantly prey species selection and frequency. In addition, the plan allows for the integrated management of both bighorn sheep populations and the mountain lion population within the project area. As an adaptive management plan we continually evaluate information and results to formulate modifications and changes in strategy to both meet objectives and test assumptions.

**PROJECT DESCRIPTION AND STRATEGIES:**

Bighorn sheep populations within the project area were divided into herd management areas (HMA) and population objectives were established for each HMA based on amount and quality of habitat. Based on where an individual HMA population is in relation to its objective determined how many sheep an individual lion is allowed to kill before the lion is lethally removed. Since field work began in February 2012, 6 lions have been captured and 5 are currently collared. The number of lions that have been captured by mountain ranges is as follows;  
Vulture Mountains – 1, Black Mountains – 1, Harcuvar Mountains – 3, Harquahala Mountains – 1

In addition to the existing snaring regime we've used, a large-scale lion snaring effort will be attempted through the use of existing trap alarms and volunteer snare monitoring. These efforts may occur from March 1 - April 30, for a 20 day period, over the entire project area.

**PROJECT LOCATION:**

See attached map

**LAND OWNERSHIP AT THE PROJECT SITE(S):**

(if the project area is private property, please state specifically and provide the landowner's name)

- BLM, State Lands, Private Lands

*IF PRIVATE PROPERTY, IS THERE A COOPERATIVE BIG GAME STEWARDSHIP or  
LANDOWNER AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?*

YES[] NO[] N/A[x]

**HABITAT DESCRIPTION:**

Chaparral, Sonoran Desert Scrub (Upper and Lower Division). Basin and range area of Arizona with large mountains, cliffs, mesas and bajadas trending into alluvial valley bottoms.

**ITEMIZED USE OF FUNDS:**

Special Big Game License Tag Funds

Airtime and data transmission coverage, misc. equipment and supplies, equipment repair..\$7,000

Cost Share or Matching Funds

Volunteer time on snaring effort 10 people for 20 days.....\$2,828

Volunteer mileage 20 man days @ 100 miles/day average @ \$.445/mile.....\$890

Total Match.....\$3,718

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

ADBSS

**WOULD IMPLEMENTATION OF THIS PROJECT ASSIST IN PROVIDING, MAINTAINING,  
OR FACILITATING RECREATIONAL ACCESS?**

YES[] NO[] N/A[x]

**PROJECT MONITORING PLAN:**

Annual Report

**PROJECT MAINTENANCE:**

Region 4

**PROJECT COMPLETION REPORT TO BE FILED BY:**

Dave Conrad (Annual Report)